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(71) Applicant (for all designated States except US): INTEL-  
LOCTY USA, INC. [US/US]; 1400 Market Street, Den-  
ver, CO 80202 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MARKEL, Steven,  
O. [US/US]; 3031 E. Wyecroft Way, Highlands Ranch, CO  
80126 (US).

(74) Agents: GALLENSON, Mavis, S. et al.; 5670 Wilshire  
Blvd., Suite 2100, Los Angeles, CA 90036 (US).

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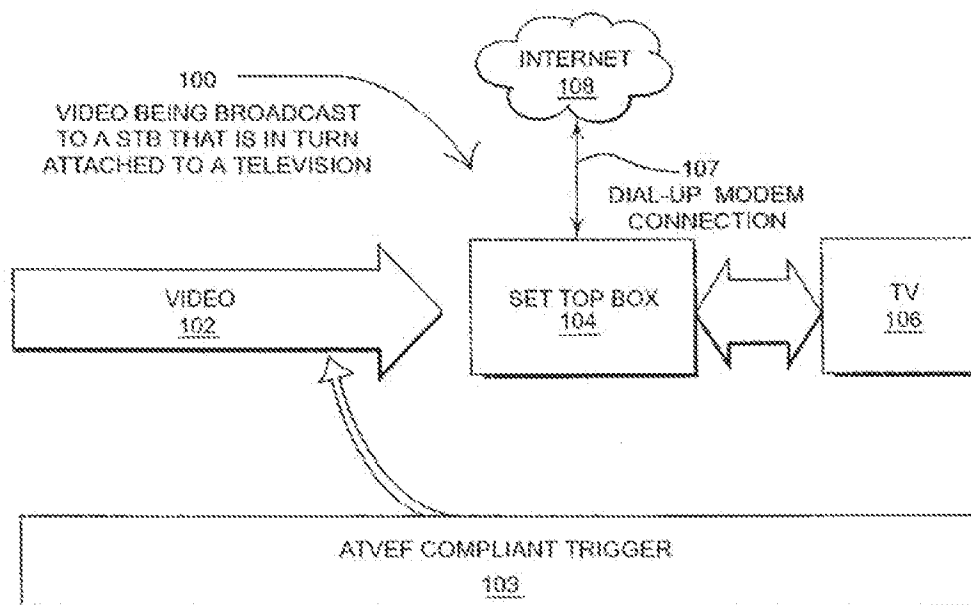
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(54) Title: CABLE TELEVISION METHOD AND SYSTEM FOR REMOTE IDENTIFICATION OF A SET TOP BOX



(57) Abstract: The head end of a cable TV network remotely identifies a subscriber set box (STB) type by using a trigger signal inserted in the video signal vertical blanking interval (VBI) which upon reception in the STB, triggers a return signal (via e.g. Internet) identifying the STB type and then transmits enhanced television services in a format compatible with the STB configuration.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

International Application No.

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## A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	US 2001/011375 A1 (YUN HWA YOUNG) 2 August 2001 (2001-08-02) abstract; figure 11	1, 8
Y	US 6 006 256 A (GARDNER LARRY J ET AL) 21 December 1999 (1999-12-21) the whole document	1-13
Y	US 5 631 903 A (VONDRUSKA SUZANNE ET AL) 20 May 1997 (1997-05-20) the whole document	1-13
Y	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 06, 30 April 1998 (1998-04-30) & JP 10 042271 A (HITACHI LTD), 13 February 1998 (1998-02-13) the whole document	1-13

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Name and mailing address of the ISA

European Patent Office, P.B. 5518 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Lockett, P

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2000 227851 A (TOSHIBA CORP) 15 August 2000 (2000-08-15) the whole document	1-13
Y	& DATABASE WPI Derwent Publications Ltd., London, GB; abstract	1-13
A	----- "FUNCTIONAL MODEL OF A CONDITIONAL ACCESS SYSTEM" EBU REVIEW- TECHNICAL, EUROPEAN BROADCASTING UNION, BRUSSELS, BE, no. 266, 21 December 1995 (1995-12-21), pages 64-77, XP000559450 ISSN: 0251-0936 page 369, column 1, paragraph 4 -page 369, column 2, paragraph 1 -----	1-13
A	CHAMBERS C S: "DESIGNING A SET-TOP BOX OPERATING SYSTEM" INTERNATIONAL CONFERENCE ON CONSUMER ELECTRONICS - DIGEST OF TECHNICALPAPERS, ROSEMONT, JUNE 7 - 9 1995, NEW YORK, IEEE, US, vol. CONF. 14, 7 June 1995 (1995-06-07), pages 368-369, XP000547858 ISBN: 0-7803-2141-3 page 76, column 1, paragraph 7.2.1C -----	1-13
P, Y	WO 01 28235 A (GOLDSCHIEDER DANIEL F) 19 April 2001 (2001-04-19) the whole document -----	1,8

## INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2001011375	A1	02-08-2001	NONE	
US 6006256	A	21-12-1999	AU 1988897 A	01-10-1997
			CN 1213479 A	07-04-1999
			DE 69701308 D1	23-03-2000
			DE 69701308 T2	13-07-2000
			EP 0890264 A1	13-01-1999
			ES 2142665 T3	16-04-2000
			JP 2000506698 T	30-05-2000
			WO 9734419 A1	18-09-1997
US 5631903	A	20-05-1997	AU 692797 B2	18-06-1998
			AU 8016394 A	29-11-1995
			CN 1154775 A ,B	16-07-1997
			DE 69417269 D1	22-04-1999
			DE 69417269 T2	09-09-1999
			EP 0757875 A1	12-02-1997
			HK 1002986 A1	17-03-2000
			JP 9512681 T	16-12-1997
			TW 388157 B	21-04-2000
			WO 9530305 A1	09-11-1995
JP 10042271	A	13-02-1998	US 6188684 B1	13-02-2001
JP 2000227851	A	15-08-2000	NONE	
WO 0128235	A	19-04-2001	AU 7811500 A	23-04-2001
			WO 0128235 A1	19-04-2001